

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below.

Please cancel claims 22 and 31 without prejudice.

Please add new claims 41-43 as presented below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-19 (Canceled)

Claim 20 (Currently Amended): A scanning microscope comprising:

a light source configured to evanescently illuminate a sample disposed on a slide;

a point detector configured to receive detection light emanating from a scanning point of the sample; and

a beam deflection device disposed in an optical path of the detection light and configured to shift a position of the scanning point; and

a color-selective segmented aperture disposed in an optical path of the illuminating light.

Claim 21 (Previously Presented): The scanning microscope as recited in claim 20 wherein the light source is configured to evanescently illuminate the sample by providing illuminating light, the illuminating light being coupled into the slide or into a cover slip of the sample.

Claim 28 (Previously Presented): The scanning microscope as recited in claim 27 wherein the additional beam deflection device is configured to direct the illuminating light beam in circles through the outer edge region of the objective pupil.

Claim 29 (Previously Presented): The scanning microscope as recited in claim 23 wherein the objective lens has a numerical aperture greater than 1.3.

Claim 30 (Previously Presented): The scanning microscope as recited in claim 29 wherein the objective lens has a numerical aperture between 1.35 and 1.42.

Claim 31 (Canceled)

Claim 32 (Currently Amended): The scanning microscope as recited in claim ~~31~~ 20 further comprising an objective lens having an objective pupil, and wherein the color-selective segmented aperture is disposed in a plane of the objective pupil.

Claim 33 (Currently Amended): The scanning microscope as recited in claim ~~31~~ 20 wherein an outer edge region of the color-selective segmented aperture is transparent to light having a wavelength of the illuminating light.

Claim 34 (Previously Presented): The scanning microscope as recited in claim 33 wherein an inner edge region of the color-selective segmented aperture is transparent only to light having a wavelength greater than the wavelength of the illuminating light.

Claim 35 (Previously Presented): The scanning microscope as recited in claim 33 wherein an inner edge region of the color-selective segmented aperture is transparent only to light having a wavelength below the wavelength of the illuminating light.

Claim 36 (Previously Presented): The scanning microscope as recited in claim 35 wherein the illuminating light includes pulsed infrared light.

Claim 37 (Previously Presented): The scanning microscope as recited in claim 20 wherein the illuminating light includes a plurality of wavelengths.

Claim 38 (Previously Presented): The scanning microscope as recited in claim 20 wherein the point detector includes at least one of a multi-band detector and a spectrometer.

Claim 39 (Previously Presented): The scanning microscope as recited in claim 20 wherein the point detector includes a detection pinhole.

Claim 40 (Previously Presented): The scanning microscope as recited in claim 20 further comprising a scanning unit configured to provide confocal scanning.

Claim 41 (New): A scanning microscope comprising:

a light source configured to evanescently illuminate a sample disposed on a slide;

a point detector configured to receive detection light emanating from a scanning point of the sample; and

a beam deflection device disposed in an optical path of the detection light and configured to shift a position of the scanning point;

wherein the point detector includes at least one of a multi-band detector and a spectrometer.

Claim 42 (New): A scanning microscope comprising:

a light source configured to evanescently illuminate a sample disposed on a slide;

a point detector configured to receive detection light emanating from a scanning point of the sample; and

a beam deflection device disposed in an optical path of the detection light and configured to shift a position of the scanning point;

wherein the point detector includes a detection pinhole.

Claim 43 (New): A scanning microscope comprising:

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a light source configured to evanescently illuminate a sample disposed on a slide;

a point detector configured to receive detection light emanating from a scanning point of the sample;

a beam deflection device disposed in an optical path of the detection light and configured to shift a position of the scanning point; and

a scanning unit configured to provide confocal scanning.